

PCT/US94/09827

PATENT COOPERATION TREATY

PCT

NOTIFICATION CONCERNING  
DOCUMENT TRANSMITTED

From the INTERNATIONAL BUREAU

To:

United States Patent and Trademark  
Office  
(Box PCT)  
Washington D.C. 20231  
United States of America

in its capacity as elected Office

Date of mailing (day/month/year)  
08 December 1995 (08.12.95)

International application No.  
PCT/US94/09827

International filing date (day/month/year)  
31 August 1994 (31.08.94)

Applicant

NUSSER, Dennis, W.

The International Bureau transmits herewith the following documents and number thereof:  
\_\_\_\_\_ copy of the international preliminary examination report and annexes (Article 36(3)(a))

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Form PCT/IB/310 (July 1992)

Authorized officer

C. Carrié

Telephone No.: (41-22) 730.91.11

000930086

## PATENT COOPERATION TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

United States Patent and Trademark  
Office  
(Box PCT)  
Washington D.C. 20231  
United States of America

in its capacity as elected Office

Date of mailing:

05 May 1995 (05.05.95)

International application No.:

PCT/US94/09827 ✓

Applicant's or agent's file reference:

12318/1

International filing date:

31 August 1994 (31.08.94)

Priority date:

07 September 1993 (07.09.93)

Applicant:

NUSSER, Dennis, W.

1. The designated Office is hereby notified of its election made:



in the demand filed with the International Preliminary Examining Authority on:

04 April 1995 (04.04.95)



in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was

was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer:

C. Roy

Telephone No.: (41-22) 730.91.11

PCT

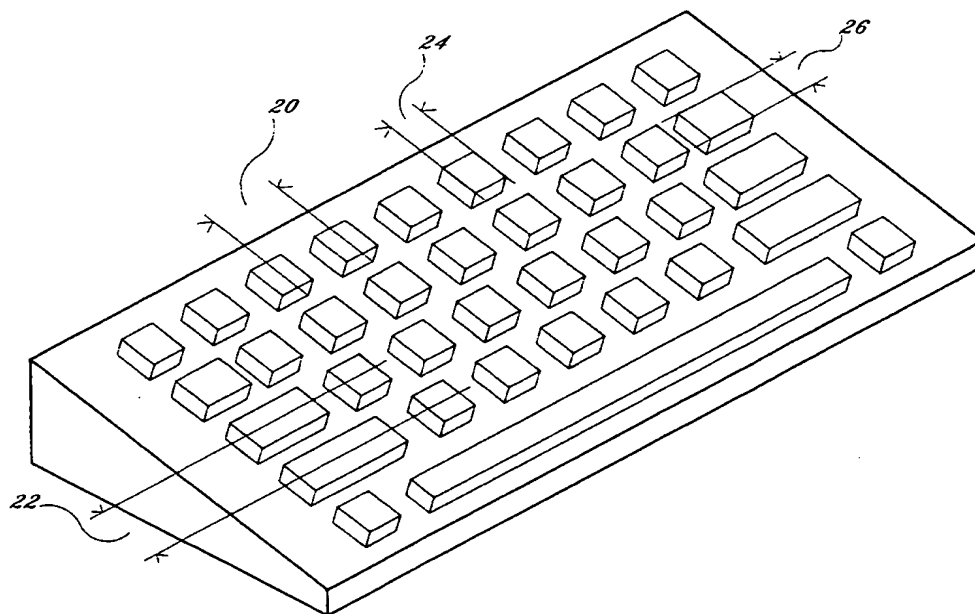
WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification<sup>5</sup> :</b> <b>B41J 5/12</b>	<b>A1</b>	<b>(11) International Publication Number:</b> <b>WO 95/07186</b> <b>(43) International Publication Date:</b> 16 March 1995 (16.03.95)
<b>(21) International Application Number:</b> PCT/US94/09827 <b>(22) International Filing Date:</b> 31 August 1994 (31.08.94) <b>(30) Priority Data:</b> 08/117,418 7 September 1993 (07.09.93) US <b>(71)(72) Applicant and Inventor:</b> NUSSE, Dennis, W. [US/US]; 512 Victoria Terrace, Fort Lauderdale, FL 33301 (US). <b>(74) Agent:</b> CALKINS, Charles, W.; Petree Stockton, L.L.P., 1001 West Fourth Street, Winston-Salem, NC 27101 (US).	<b>(81) Designated States:</b> AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, MW, SD).  <b>Published</b> <i>With international search report.</i>	

**(54) Title:** INPUT APPARATUS FOR PEOPLE HAVING SMALL HANDS ✓



**(57) Abstract**

Input apparatus scaled for non-adult humans and adult humans having small hands. The input apparatus are especially well suited for use as computer keyboards for use by schoolchildren. Also disclosed is a computing system including the input apparatus.

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US94/09827**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(5) :B41J 5/12

US CL :400/472

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 341/21, 22; 404/472, 682

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
NONEElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
NONE**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y P	US, A, 5,334,976, (WANG), 2 August 1994. See Fig.1, column 2 lines 32-41, and column 6 lines 15-16.	1-9
A	US, A, 3,940,758, (MARGOLIN), 24 February 1976.	1-9

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	*T	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
*A* document defining the general state of the art which is not considered to be part of particular relevance	*X*	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
*E* earlier document published on or after the international filing date	*Y*	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*G*	document member of the same patent family
*O* document referring to an oral disclosure, use, exhibition or other means		
*P* document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search

19 October 1994

Date of mailing of the international search report

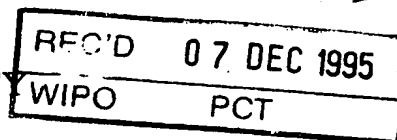
07 DEC 1994

Name and mailing address of the ISA/US  
Commissioner of Patents and Trademarks  
Box PCT  
Washington, D.C. 20231Authorized officer  
ANTHONY NGUYEN

Facsimile No. (703) 305-3230

Telephone No. (703) 308-2869

## PATENT COOPERATION TREATY



## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 12318/1	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US94/09827	International filing date (day/month/year) 31 AUGUST 1994	Priority date (day/month/year) 07 SEPTEMBER 1993
International Patent Classification (IPC) or national classification and IPC IPC(6): B41J 5/12; and US Cl.: 400/472		
Applicant NUSSER, DENNIS W.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 3 sheets.
- ☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).
- These annexes consist of a total of 1 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of report with regard to novelty, inventive step or industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 04 APRIL 1995	Date of completion of this report 21 SEPTEMBER 1995
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231	Authorized officer  ANTHONY NGUYEN
Facsimile No. (703) 305-3230	Telephone No. (703) 308-2869

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US94/09827

## I. Basis of the report

1. This report has been drawn on the basis of *(Substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments):*

☒ the international application as originally filed.

☒ the description, pages 1-11, as originally filed.

pages NONE, filed with the demand.

pages NONE, filed with the letter of \_\_\_\_\_.

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

☒ the claims, Nos. NONE, as originally filed.

Nos. NONE, as amended under Article 19.

Nos. NONE, filed with the demand.

Nos. 1-9, filed with the letter of 10 July 1995.

Nos. \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

☒ the drawings, sheets/fig 1, 2, as originally filed.

sheets/fig NONE, filed with the demand.

sheets/fig NONE, filed with the letter of \_\_\_\_\_.

sheets/fig \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

2. The amendments have resulted in the cancellation of:

☒ the description, pages NONE.

☒ the claims, Nos. NONE.

☒ the drawings, sheets/fig NONE.

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box Additional observations below (Rule 70.2(c)).

4. Additional observations, if necessary:

NONE

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US94/09827

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. STATEMENT**

Novelty (N)

Claims 1-9 YESClaims NONE NO

Inventive Step (IS)

Claims 1-9 YESClaims NONE NO

Industrial Applicability (IA)

Claims 1-9 YESClaims NONE NO**2. CITATIONS AND EXPLANATIONS**

Claims 1-9 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest a keyboard having keys arranged with a horizontal key spacing, centerline to centerline, of 10.8 millimeters and 16.4 millimeters, and a vertical key spacing, centerline to centerline, of 10.8 millimeters to 18.0 millimeters.

\_\_\_\_\_ NEW CITATIONS \_\_\_\_\_